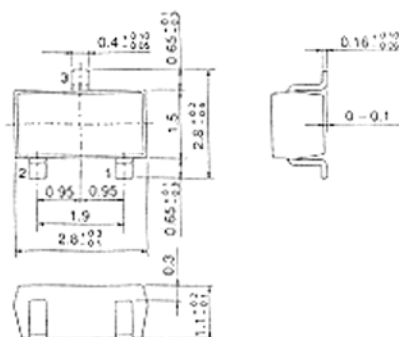


2SD1306

SILICON NPN EPITAXIAL
LOW FREQUENCY AMPLIFIER
MUTING



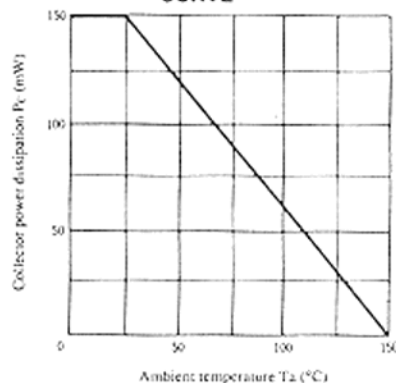
1. Emitter
 2. Base
 3. Collector
- (Dimensions in mm)

(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SD1306	Unit
Collector to base voltage	V_{CB0}	30	V
Collector to emitter voltage	V_{CE0}	15	V
Emitter to base voltage	V_{EB0}	5	V
Collector current	I_C	0.7	A
Collector power dissipation	P_C	150	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	30	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	15	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = 20V, I_E = 0$	—	—	1.0	μA
DC current transfer ratio	h_{FE}^*	$V_{CE} = 1V, I_C = 150mA^{**}$	250	—	800	
Base to emitter voltage	V_{BE}	$V_{CE} = 1V, I_C = 150mA^{**}$	—	—	1.0	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA^{**}$	—	—	0.5	V
Gain bandwidth product	f_T	$V_{CE} = 1V, I_C = 150mA^{**}$	—	250	—	MHz

* The 2SD1306 is grouped by h_{FE} as follows.

** Pulse Test

Grade	D	E
Mark	ND	NE
Int.	250 to 500	400 to 800

■ See characteristic curves of 2SD1504.